

Major Household Appliances: 2001

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These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. Manufacturers' shipments of major household appliances increased 2 percent, from \$17.0 billion in 2000 to \$17.4 billion in 2001. Shipments of household cooking equipment, including parts and accessories, decreased 6 percent, from \$4.2 billion in 2000 to \$4.0 billion in 2001. The value of household refrigerators and freezers, including parts and attachments, decreased 3 percent, from \$5.5 billion in 2000 to \$5.3 billion in 2001. Shipments for household laundry equipment and parts increased 3 percent, from \$4.0 billion in 2000 to \$4.1 billion in 2001. Shipments for household appliances, not elsewhere classified, valued at \$2.1 billion in 2000 remained virtually unchanged for 2001.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Investment Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Vera Harris-Bourne, 301-457-1604.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-457-4673.

U S C E N S U S B U R E A U

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U.S. CENSUS BUREAU



Table 1. Value of Shipments of Major Household Appliances by Product Class: 1994 to 2001
[Millions of dollars]

Product code	Product description	2001	2000	1999	1998	1997	1996	1995	1994
3352211110	Electric household ranges, ovens, and surface cooking units, equipment, and parts.....	1,926.9	2,170.3	2,197.1	2,242.9	2,099.9	1,865.8	1,791.8	1,791.1
3352213000	Gas household ranges, ovens, and surface cooking units, equipment, and parts.....	902.0	779.1	786.3	696.7	606.8	544.6	654.1	649.6
3352215000	Other household ranges, cooking equipment and outdoor cooking equipment, including parts and accessories.....	1,096.6	1,251.1	1,218.6	1,029.0	1,082.0	1,004.0	911.6	872.7
3352221000	Household refrigerators, including combination refrigerator-freezers 1/.....	5,227.1	5,395.8	4,968.8	5,035.6	5,272.4	5,084.4	4,739.4	4,882.1
3352222000	Food freezers, complete units, for freezing and/or storing frozen food (household type) 1/.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
3352223000	Parts and attachments for household refrigerators and freezers.....	114.0	99.4	92.4	89.7	155.8	160.7	111.8	84.7
3352240000	Household laundry machines and parts.....	4,149.7	4,046.6	4,029.7	3,327.3	3,191.5	3,217.9	3,095.4	3,361.4
3352281000	Water heaters, electric.....	555.7	572.7	580.0	541.3	552.3	558.8	513.0	516.4
3352283000	Water heaters (except electric).....	798.4	843.6	842.8	810.7	748.7	764.6	681.8	748.8
3352285000	Household appliances, n.e.c., and parts.....	2,051.0	2,066.1	1,998.8	1,867.9	1,671.4	1,601.6	1,579.2	1,624.3

D Withheld to avoid disclosing data for individual companies. n.e.c. Not elsewhere classified.

1/Product code 3352221000 is combined with product code 3352222000 to avoid disclosing data for individual companies.

Table 2. Quantity and Value of Shipments of Major Household Appliances: 2001 and 2000
[Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	No. of cos.	2001		2000	
			Quantity	Value	Quantity	Value
	Major household appliances.....	(NA)	(X)	17,381.3	(X)	17,041.0
3352211	Electric ranges, ovens, and surface cooking units, equipment, and parts.....	16	5,447.6	1,926.9	5,945.7	2,170.3
	Free-standing ranges (widths are based on outside dimensions):					
3352211311	Under 23 inches (58.4 cm) in width, all types, including apartment house type.....	3	(D)	(D)	(D)	(D)
3352211313	23 inches (58.4 cm) up to and including 32 inches (81.3 cm) in width.....	10	3,043.0	1,066.1	2,926.0	1,142.3
3352211315	33 inches (83.8 cm) and over in width, all types.....	1	(D)	(D)	(D)	(D)
	Other than free-standing:					
	Built-in ranges:					
	Built-in ovens:					
3352211417	Single oven.....	7	458.0	269.8	401.5	255.1
3352211419	Two ovens.....	5	97.9	84.7	146.5	148.3
3352211421	Surface cooking tops.....	6	387.0	108.5	431.3	147.9
3352211423	Drop-in ranges.....	3	(D)	(D)	(D)	(D)
3352211525	Microwave ranges and ovens, including combination microwave/electric ranges and built-in ovens that utilize microwave and electric thermal energy in one or more of the oven cavities.....	4	70.8	78.2	84.3	89.4
3352211527	Microwave ovens, including counter top, built-in and wall or cabinet-hung ovens.....	2	(D)	(D)	(D)	(D)
3352211290	Parts and accessories for household electric ranges and ovens, such as burners, rotisseries, oven racks, and broiler pans, sold separately.....	10	(X)	80.3	(X) r/	92.9
3352213	Gas household ranges, ovens, and surface cooking units, equipment, and parts.....	15	2,135.8	902.0	1,825.0	779.1
	Standard type, free-standing:					
3352213111	Over 32 inches (81.3 cm) cooking top and oven 1/.....	4	(D)	(D)	(D)	(D)
3352213113	Over 24 inches (61 cm) to 32 inches (81.3 cm) cooking top and oven 1/.....	9	(D)	(D)	(D)	(D)
3352213115	Apartment ranges, 24 inches (61 cm) cooking top and oven.....	3	171.7	33.6	176.1	34.0
3352213117	Standard type, for built-in installation (built-in or stack-on oven broiler unit) 2/.....	4	(D)	(D)	(D)	(D)
3352213119	Surface cooking tops (one or more burners).....	8	343.8	137.9	200.5	129.6
3352213121	Nonstandard types, including wall-hung, slide-in, or drop-in.....	4	228.8	67.4	275.2	85.3
3352213123	Other gas household ranges, ovens, hot plates, and surface cooking units, not listed above 2/.....	2	(D)	(D)	(D)	(D)
3352213190	Parts and accessories for gas household ranges and ovens, such as burners, rotisseries, oven racks, and broiler pans, sold separately.....	9	(X)	65.9	(X)	92.1
3352215	Other household ranges and cooking equipment (except gas and electric) and outdoor cooking equipment, including parts and accessories.....	26	9,118.8	1,096.6 r/	11,153.2	1,251.1
	Barbecuers, grills, stoves, braziers, etc., for outdoor cooking and other cooking:					
	Portable units:					
3352215111	Gas fuel or both gas and other fuel.....	17 b/	5,060.8 b/	809.4	6,182.6	946.7
3352215113	Solid fuel (charcoal, wood, coal, etc.).....	10	3,648.6	114.4 r/	4,456.5 r/	135.2
3352215115	Liquid fuel (oil, kerosene, etc.).....	3 b/	316.9 b/	36.2 b/	382.7 b/	43.7

Continued

Table 2. Quantity and Value of Shipments of Major Household Appliances: 2001 and 2000
[Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	No. of cos.	2001		2000	
			Quantity	Value	Quantity	Value
3352215117	All other outdoor and other cooking equipment.....	5 b/	92.4	17.7 a/	131.4	22.4
3352215190	Parts and accessories for outdoor and other cooking equipment, sold separately.....	15	(X) b/	119.0	(X)	103.1
3352221	Household refrigerators, including combination refrigerator-freezers 3/.....	18	11,776.4	5,227.1	12,354.7	5,395.8
	Compression type, fitted with separate external doors, including all combinations with two or more external doors:					
3352221010	15.4 cu. ft. and under (under 438 liters)	5	710.5	193.2	823.9	216.4
3352221017	15.5 to 17.4 cu. ft. (438 liters but under 495 liters).....	6	723.4	213.3	839.3	242.7
3352221019	17.5 to 19.4 cu. ft. (495 liters but under 552 liters).....	8	2,718.1	916.4	2,754.7	900.7
3352221021	19.5 to 21.4 cu. ft. (552 liters but under 608 liters).....	9	1,197.6	672.7	1,160.8 r/	710.9
3352221023	21.5 to 24.4 cu. ft. (608 liters but under 693 liters).....	8	1,782.4	1,155.7	2,129.6	1,228.8
3352221025	24.4 cu. ft. and over (693 liters and over).....	9	1,642.6	1,414.7	1,732.2	1,437.5
	Compression type, fitted with only one external door:					
3352221027	6.4 cu. ft. and under (under 184 liters).....	5	826.9	140.8	746.0	134.1
3352221029	6.5 cu. ft. and over (184 liters and over).....	5	(D)	(D)	(D)	(D)
3352221031	Other household refrigerators.....	3	(D)	(D)	(D)	(D)
3352222	Food freezers, complete units, for freezing and/or storing frozen food (household type) 3/:					
3352222010	Upright and chest type freezers.....	7	(D)	(D)	(D)	(D)
3352223000	Parts and attachments for household refrigerators and freezers, excluding compressors and condensing units and icemaking machines.....	13	(X)	114.0	(X) r/	99.4
3352240	Household laundry machines (household type defined as having dry linen capacity not exceeding 10 kg (22 lb)).....	8	15,182.0	4,149.7	15,044.9	4,046.6
	Washing machines, mechanical (electric):					
3352240211	Coin-operated.....	4	(D)	(D)	(D)	(D)
3352240213	Noncoin-operated.....	8	7,978.7	2,224.5	8,042.9	2,208.4
3352240215	Other washing machines, including machines with built-in centrifugal drier and gasoline driven.....	2	(D)	(D)	(D)	(D)
	Dryers, mechanical (incorporating heat):					
3352240317	Gas (noncoin-operated).....	7	1,366.0	369.2	1,421.9	372.8
3352240319	Electric (noncoin-operated).....	7	5,046.4	1,108.8	4,816.3	1,033.6
3352240321	Coin-operated.....	4	137.7	61.9	132.7	60.4
	Parts, accessories, and attachments for household laundry equipment, sold separately.....	8	(X)	140.7	(X) r/	145.7
3352240191	For household washing machines.....	7	(X)	134.4	(X)	140.6
3352240195	For household drying machines.....	3	(X)	(D)	(X)	(D)
3352281	Water heaters, electric (for permanent installation).....	8	4,316.6	555.7	4,408.4	572.7
	Storage type:					
3352281011	34 gallons and under (under 132 liters).....	6	1,022.7	110.5	1,139.4	135.8
3352281013	35 to 44 gallons (132 liters but under 170 liters).....	6	1,380.4	167.9	1,394.1	168.1
3352281015	45 to 54 gallons (170 liters but under 208 liters).....	5	1,218.5	167.5	1,178.7	160.6
3352281017	55 gallons and over (208 liters and over) 4/.....	6	(D)	(D)	(D)	(D)

Continued

Table 2. Quantity and Value of Shipments of Major Household Appliances: 2001 and 2000
[Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	No. of cos.	2001		2000	
			Quantity	Value	Quantity	Value
3352281019	Other types, including circulating and portable storage 4/.....	4	(D)	(D)	(D)	(D)
3352283	Water heaters (except electric).....	8	4,917.0	798.4	6,217.8	843.6
3352283018	Direct-fired water heaters, gas or oil.....	9	4,782.5	766.5	6,076.7	811.7
3352283015	Indirect water heaters, including storage, cast or coil type (less tank); tanks (with or without generator coils); generator coils with tank collar (sold without tank); and instantaneous.....	6	134.5	31.9	141.1	31.8
3352285	Other household type appliances and parts, n.e.c.	16	14,094.2	1,986.2	r/ 15,621.6	1,981.9
	Dishwashing machines:					
3352285111	Portable type, including convertible type.....	3	(D)	(D)	(D)	(D)
3352285113	Built-in type.....	5	5,376.7	1,390.3	5,895.7	r/ 1,390.1
3352122219	Floor-waxing, polishing, scrubbing and shampooing machines (for household use only).....	3	(D)	(D)	(D)	(D)
3352285117	Food waste disposals (all sizes, of the electromechanical comminutor type, operating in conjunction with household plumbing systems of the type generally used in residences).....	3	(D)	(D)	(D)	(D)
3352285119	Household trash compactors.....	2	(D)	(D)	(D)	(D)
	Parts for other household appliances, n.e.c.:					
3352285193	For electric water heaters (value only).....	5	(X)	10.8	(X)	18.4
3352285195	For nonelectric water heaters (value only).....	3	(X)	9.8	(X)	14.5
3352285197	For dishwashing machines (value only).....	7	(X)	(D)	(X)	(D)
3352122211	For floor-waxing, polishing, scrubbing and shampooing machines.....	2	(X)	(D)	(X)	(D)
3352285199	For other major household appliances, n.e.c. (value only).....	5	(X)	19.1	(X)	21.2

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified. r/Revised by 5 percent or more from previously published data. X Not applicable.

1/Product codes 3352213111 and 3352213113 sum to: 2001 quantity, 1,345,798; 2001 value, 574,809; 2000 quantity, 1,122,639; 2001 value, 411,238 .

2/Product codes 3352213117 and 3352213123 sum to: 2001 quantity, 45,813; 2001 value, 22,353; 2000 quantity, 50,489; 2000 value, 260,858 .

3/Product class 3352221 and 3352222 have been combined.

4/Product codes 3352281017 and 3352281019 sum to: 2001 quantity, 695,019; 2001 value, 109,802; 2000 quantity, 696,209; 2000 value, 108,094 .

Note: Percent of estimation of each item is indicated as follows: a/10 to 25 percent of this item is estimated. b/26 to 50 percent of this item is estimated. c/Over 50 percent of this item is estimated.

Table 3. Shipments, Exports, and Imports of Major Household Appliances: 2001
[Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise 1/ 2/		Imports for consumption 1/ 3/	
		Quantity	Value	Quantity	Value	Quantity	Value
3352211311, 313, 417, 419, 421, 423, 525	Electric ranges, ovens, and surface cooking units; microwave oven combinations.....	(D)	(D)	96.2	57.7	10,459.8	541.3
3352211527	Microwave ovens.....	(D)	(D)	423.0	66.8	(X)	(X)
3352211290	Parts and accessories for electric ranges and ovens.....	(X)	80.3	(X)	135.2	(X)	142.6
3352213111, 113, 115, 117, 119, 121, 123	Gas ranges, ovens, and surface cooking units.....	2,135.8	836.1	80.0	32.0	1,934.1	359.4
3352213190	Parts and accessories for gas ranges and ovens and other cooking equipment.....	(X)	65.9	(X)	19.3	(X)	69.9
	Other household ranges and cooking equipment, including barbecuers, grills, stoves, braziers, etc., (except gas and electric) for outdoor cooking and other cooking:						
3352215111	Gas fuel or both gas and other fuel.....	5,060.8	809.4	688.2	63.6	(X)	(X)
3352215113	Solid fuel (charcoal, wood, and coal).....	3,648.6	114.4	315.7	17.4	4,598.7	67.0
3352215115	Liquid fuel (oil and kerosene).....	316.9	36.2	111.2	4.8	499.5	8.0
3352215117	All other outdoor cooking equipment.....	92.4	17.7	93.9	6.7	342.6	12.3
3352221010, 017, 019, 021, 023, 025	Compression type refrigerators, fitted with separate external doors, including all combinations with two or more external doors.....	(D)	(D)	4,566.0	424.1	994.4	461.5
	Compression type refrigerators, fitted with one external door:						
3352221027	6.4 cu. ft. and under (under 184 liters).....	(D)	(D)	33.2	15.3	2,411.7	204.0
3352221029	6.5 cu. ft. and over (184 liters and over).....	(D)	(D)	190.6	91.6	114.1	20.8
3352221031	Other household refrigerators, noncompression, fitted with one external door.....	(D)	(D)	126.7	40.9	179.3	73.2
3352222010	Upright and chest type freezers.....	(D)	(D)	218.8	77.3	617.1	88.9
3352240211	Fully automatic electric washing machines (coin-operated).....	(D)	(D)	88.9	29.3	4.8	7.8
3352240213	Fully automatic electric washing machines (noncoin-operated).....	7,978.7	2,224.5	677.4	207.3	231.2	62.3
3352240215	Other washing machines.....	(D)	(D)	34.5	14.8	9.1	0.9
3352240317, 319	Gas and electric dryers (noncoin-operated).....	6,412.5	1,477.9	16.0	6.3	1.2	0.3
3352240321	Dryers (coin-operated).....	137.7	61.9	472.8	95.9	636.9	105.0
3352281011, 013, 015, 017	Water heaters, electric, storage type.....	(D)	(D)	(NA)	(NA)	(NA)	(NA)
3352281019	Water heaters, electric, other.....	(D)	(D)	(NA)	(NA)	(NA)	(NA)
3352283018	Direct-fired water heaters, gas or oil.....	4,782.5	766.5	(NA)	(NA)	(NA)	(NA)
3352283015	Indirect water heaters.....	134.5	31.9	(NA)	(NA)	(NA)	(NA)
	Other household type appliances, n.e.c.:						
3352285111, 113	Dishwashing machines, household.....	5,376.7	1,390.3	413.4	98.4	174.6	61.0
3352122219	Floor-waxing, polishing, scrubbing, and shampooing machines, household.....	(D)	(D)	31.6	2.8	9.8	2.7

Continued

Table 3. Shipments, Exports, and Imports of Major Household Appliances: 2001
 [Quantity in thousands of units. Value in millions of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise 1/ 2/		Imports for consumption 1/ 3/	
		Quantity	Value	Quantity	Value	Quantity	Value
3352285117, 119	Food waste disposals.....	(D)	(D)	293.5	20.6	43.1	0.9
3352285193, 195, 197, 3352122211, 3352285199	Parts for other major household appliances....	(X)	(D)	(X)	4.7	(X)	36.5

D Withheld to avoid disclosing data for individual companies. NA Not available. n.e.c. Not elsewhere classified.
 X Not applicable.

1/For comparison of North American Industry Classification System (NAICS)-based codes with Schedule B export codes, and HTSUSA import codes, see Table 4.

2/Source: Census Bureau report EM 545, U.S. Exports.

3/Source: Census Bureau report IM 145, U.S. Imports for Consumption.

Note: Data may not add because of independent rounding.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2001

Product code	Product description	Export code 1/	Import code 2/
3352211311, 313, 417, 419, 421, 423, 525	Electric ranges, ovens, and surface cooking units; microwave oven combinations.....	8516.60.4000	8516.60.4060 8516.60.4070 8516.60.4080
3352211527	Microwave ovens.....	8516.50.0000	8516.50.0030 8516.50.0060 8516.50.0090
3352211290	Parts and accessories for electric ranges and ovens.....	8516.90.1700 8516.90.2700 8516.90.9500	8516.90.3500 8516.90.4500 8516.90.5000 8516.90.5500 8516.90.6500 8516.90.7500 8516.90.8000
3352213111, 113, 115, 117, 119, 121, 123	Gas ranges, ovens, and surface cooking units.....	7321.11.5000	7321.11.3000 7321.11.6000
3352213190	Parts and accessories for gas ranges and ovens, and other cooking equipment.....	7321.90.6050	7321.90.1000 7321.90.2000 7321.90.4000 7321.90.5000 7321.90.6030
3352215111	Gas fuel or both gas and other fuel.....	7321.11.1000	7321.11.1030 7321.11.1060
3352215113	Solid fuel (charcoal, wood, and coal).....	7321.13.0050	7321.13.0020 7321.13.0040
3352215115	Liquid fuel (oil and kerosene).....	7321.12.0000	7321.12.0000
3352215117, 190	All other outdoor and other cooking equipment.....	7321.13.0070	7321.13.0060 7321.13.0080

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Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2001

Product code	Product description	Export code 1/	Import code 2/
3352221010, 017, 019, 021, 023, 025	Compression type refrigerators, fitted with separate external doors, including all combinations with two or more external doors.....	8418.10.0010	8418.10.0010
		8418.10.0020	8418.10.0020
		8418.10.0030	8418.10.0030
		8418.10.0040	8418.10.0040
	Compression type, fitted with one external door:		
3352221027	6.4 cu. ft. and under (under 184 liters).....	8418.21.0010	8418.21.0010
3352221029	6.5 cu. ft. and over (184 liters and over).....	8418.21.0020	8418.21.0020
		8418.21.0030	8418.21.0030
		8418.21.0090	8418.21.0090
3352221031	Other household refrigerators, noncompression, fitted with one external door.....	8418.10.0090	8418.10.0090
		8418.22.0000	8418.22.0000
		8418.29.0000	8418.29.0000
3352222010	Upright and chest type freezers.....	8418.40.0000	8418.40.0000
		8418.30.0000	8418.30.0000
3352240211	Fully automatic washing machines, electric (coin-operated).....	8450.11.0010	8450.11.0010
3352240213	Fully automatic washing machines, electric (noncoin-operated).....	8450.11.0090	8450.11.0040
			8450.11.0080
3352240215	Other washing machines.....	8450.12.0000	8450.12.0000
		8450.19.0000	8450.19.0000
		8450.20.0010	8450.20.0010
		8450.20.0090	8450.20.0090
3352240317, 319	Dryers (noncoin-operated) and other drying equipment.....	8451.21.0090	8451.21.0090
3352240321	Dryers (coin-operated).....	8451.21.0010	8451.21.0010

Continued

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2001

Product code	Product description	Export code 1/	Import code 2/
3352285111, 113	Dishwashing machines, household.....	8422.11.0000	8422.11.0000
3352122219	Floor-waxing, polishing, scrubbing, and shampooing machines.....	8509.20.0000	8509.20.0000
3352285117, 119	Food waste disposals.....	8509.30.0000	8509.30.0000
3352285197, 3352122211	Parts for other major household appliances.....	8422.90.0540 8509.90.3000	8422.90.0200 8422.90.0400 8422.90.0640 8509.90.2500 8509.90.3500

1/Source: 2001 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2001).

Appendix.

General CIR Survey Information, Explanation of General Terms and Historical Note

GENERAL

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Food Services
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

FUNDING

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

RELIABILITY OF DATA

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

DATA REVISIONS

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

DISCLOSURE

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

EXPLANATION OF GENERAL TERMS

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

Consumption. Materials used in producing or processing a product or otherwise removing the product from the inventory.

Exports. Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

Net receipts. Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

Production. The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped,

net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

Unfilled orders (backlog). Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

HISTORICAL NOTE

Data on major household appliances have been collected by the Census Bureau since 1968. Historical data may be obtained from Current Industrial Reports available at your local Federal Depository Library.